



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/638,179	08/07/2003	Ulrich Birnbaum	DT-6591	3742

30377 7590 05/03/2005

DAVID TOREN, ESQ.  
SIDLEY, AUSTIN, BROWN & WOOD, LLP  
787 SEVENTH AVENUE  
NEW YORK, NY 10019-6018

EXAMINER
----------

MACARTHUR, VICTOR L

ART UNIT	PAPER NUMBER
----------	--------------

3679

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/638,179	Applicant(s) BIRNBAUM ET AL	
	Examiner Victor MacArthur	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-15 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-15 and 19-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/7/2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

18

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Species III in the reply filed on 3/14/2005 is acknowledged.

Claims 9, 16-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 3/14/2005.

Note that claim 9 is not directed to the elected Species since only the first member (32) and not the second member (33) of the elected species (as seen in figs. 3, 3a, 4 and 5) has notches. Rather, claim 9 is directed to unelected species (as seen in fig.1) in which both the first (2) and second member (3) have notches (7).

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "support" (line 2 of claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

Art Unit: 3679

be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Preamble*

The preamble of claim 1 merely recites the use or purpose of the claimed invention such that the body of the claim following the preamble is a self-contained description of the structure and does not depend on the preamble for completeness. Accordingly, the examiner has determined that the preamble does not limit the claim. The examiner has considered the claims **without** combination (emphasis added). See MPEP 2111.02 and *Kropa v. Robie*, 88 USPQ at 480-481; *Rowe*, 42 USPQ2d at 1553; and *IMS Technology Inc. v. Haas Automation Inc.*, 54 USPQ2d 1129, 1137 (Fed.Cir.2000).

### *Claim Objections*

Claims 1, 2, 4, 6, 12 and 20 are objected to because of the following informalities:

- The limitation "such as an assembly system having system supports" (lines 1-2 of claim 1) should be deleted to improve claim clarity.

Art Unit: 3679

- The limitation “of the outer walls” (line 3 of claim 1) lacks proper antecedent basis and should be replaced with --outer wall--.
- The limitation “A onnecting element” (line 1 of claim 2) should be replaced with --A connecting element--.
- The recitation “and at least one of said first and second members... said at least one elongated opening” (lines 2-5 of claim 2) has been previously set forth in lines 5-7 of claim 1. Accordingly this repeated recitation should be deleted from claim 2.
- The “third member (32)” (lines 1-2 of claim 4; and line 1 of claim 20) creates a double inclusion with the “first member (2; 12; 32)” since both recitations refer to the same element, as it pertains to the elected species (elements 2 and 12 are not part of the elected species). Additionally, claims 4 and 20 do not recite any limitations regarding the third member that have not been previously recited in claim 1. Accordingly, claims 4 and 20 should be deleted.
- The limitation “the support” (line 2 of claim 6) has not been positively set forth previously and therefore lacks proper antecedent basis in the claims. The limitation should be replaced with --a support--.
- The limitation “said bead walls” (line 2 of claim 12) lacks proper antecedent basis and should be replaced with --bead wall--.

Appropriate correction is required. For purposes of examining the instant invention, the examiner has assumed these corrections have been made.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10-15, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Madl (U.S. Patent 4,899,497).

Claim 1. Madl discloses (fig.4) a connecting element, **the connecting element** comprising a first member (42) and at least one second member (60) with at least one of said first and second members having at least one elongated opening (oversized holes in 42 as described in col.5, ll.37-40) with at least notches (142) over the length of said at least one elongated opening. Note that the Madl connecting element is structurally capable of performing the intended use of being “for an assembly system comprising a plurality of supports, wherein the supports have openings arranged in a defined spacing on at least one of the outer walls of the support”. Further note that the Madl elongated opening is structurally capable of performing the intended use limitation of being “for securing said connecting element to a support or to a base surface by a fastening element, passed through the at least one elongated opening, engageable with complementary notches of a fastening element”.

Claim 2. Madl discloses that the second member is arranged essentially perpendicular to said first member.

Claim 3. Madl discloses that said second member is a connector formed of a profile section (profile section of 60) with openings (64) for fixing a support by fastening elements passable through said openings in said connector.

Claim 4. Madl discloses (as previously recited in claim 1, see objection to claim 4) that the first member has at least one elongated opening with notches located along the length of said at least one elongated opening for engagement with complementary notches of a fastening element.

Claim 5. Madl discloses that an outer contour of said connector is formed complementary to an inner contour of a support (62) so that said support can slide over said connector.

Claim 6. Madl discloses that an inner contour of the connector is shaped complimentary to an outer contour of a support (110 as seen in figure 10) so that the support can be inserted into the connector.

Claim 7. Madl discloses that said connector has a rectangular configuration (configuration of 60) and the openings are arranged parallel to a plane for the passage of a fastening element, with said plane formed through said first member of the connecting element.

Claim 8. Madl discloses that a plurality of openings (holes 64 in 60 receiving 66 as seen in figures 4 and 6) are arranged vertically relative to each other in a plurality of planes parallel to each other.

Claim 10. Madl discloses that said notches comprise teeth.

Claim 11. Madl discloses that the connecting element has at least one bead (142 on 46 as seen in figure 17) extending in the elongated direction of said openings.

Art Unit: 3679

Claim 12. Madl discloses that the teeth are arranged in at least one bead wall (wall of 142 of 46 as seen in fig.17) of said at least one bead.

Claim 13. Madl discloses that a surface zone surrounding at least one said elongated opening has notches (surface zone containing 142 on 42).

Claim 14. Madl discloses that the notches extend parallel to one another transversely of the length of said at least one elongated opening.

Claim 15. Madl discloses that an outer contour of said at least one member is complementary to the outer contour of at least one of a support (62) capable of being connected with said connecting element.

Claim 19. Madl discloses that the second member is formed of a hollow section.

Claim 20. Madl discloses that the first member is arranged in a plane with itself.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Madl (U.S. Patent 4,899,497).

Claim 21. A pitch of 2.5 mm is within the scope of the disclosure of the Madl teeth. However, Madl does not expressly state the exact tooth pitch. Madl states that the teeth are for prevention of sliding between components (col.5, ll.43-47). One of ordinary skill in the art



Art Unit: 3679

would recognize that a tooth pitch of 2.5 mm is capable of preventing sliding between components. It has generally been recognized that the optimization of proportions in a prior art device is a design consideration within the skill of the art. In re Reese, 290 F.2d 839, 129 USPQ 402 (CCPA 1961). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to optimize the proportion of the Madl tooth pitch to be 2.5 mm, in accordance with the scope of the Madl disclosure, as such practice is a design consideration within the skill of the art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Referring to connecting elements:

Smith U.S. Patent 3,866,658

Nehls U.S. Patent 4,926,592

Bryant U.S. Patent 5,259,821

Seibold U.S. Patent 5,435,107

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (571) 272-7085.

The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Art Unit: 3679

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

*VLM*

VLM

April 27, 2005

*(Daniel P. Stodola)*

DANIEL P. STODOLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600